UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

DATE: DEC 10 2013

SUBJECT: INSPECTION REPORT – Sanimax, Green Bay, Wisconsin

FROM: Michelle Heger, Environmental Scientist
AECAS (IL/IN)

THRU: Nathan Frank, Chief
AECAS (IL/IN)

TO: File

Date of Inspection: May 30, 2013

Attendees: Michelle Heger, Environmental Scientist, U.S. EPA
Molly DeSalle, Environmental Scientist, U.S. EPA
Kevin Martin, Rendering Operations Supervisor, Sanimax
Donn Johnson, General Manager, Sanimax
Grant Johnson, Environmental Supervisor, Sanimax
Tony Loritz, Plant Manager, Sanimax
Kerry DeKeyser, U.S. Environmental Health & Safety Manager, Sanimax

Purpose of Inspection:

The purpose of conducting an inspection of the Sanimax, Green Bay, Wisconsin facility was to assess compliance with air pollution control regulations under the Clean Air Act, with federally approved portions of the Wisconsin State Implementation Plan, and with their permit. EPA received numerous odor complaints regarding the facility from the county office in the weeks leading up to the inspection. The facility is currently operating under a synthetic minor permit No. 405042880-F11.

Company Description and Background:

Location: 2099 Shawano Avenue, Green Bay, WI 54307-0067
Primary Contact: Tony Loritz, Plant Manager, Sanimax

Sanimax operates an inedible rendering process that handles tallow (animal fat), meat, and bone meal (high in protein). The facility operates 24 hours per day, 6 days per week.

Permit Requirements:

The facility is operating under a synthetic minor source permit. Each of the facility boilers has limits for particulate matter (PM), visible emissions, sulfur dioxide (SO2), and nitrogen oxides (NOx). In addition, the facility must operate the facility ventilation and scrubber system for control of PM, VOCs, and odor control.

Inspection:

EPA representatives conducted surveillance in the surrounding neighborhoods surrounding the facility on May 30th.

Time	Location	Observation
1:17 pm	Parking lot of "Just4Kids" daycare	Slight odor during a break in the wind
1:30 pm	Immediately north of facility	Constant strong odor for an extended 5 mintues Railcar observed backing into facility
1:38 pm	Road leading into facility	Strong odor

Opening Meeting and Discussion

U.S. EPA representatives ("we") arrived at the Sanimax facility at approximately 1:45 pm CST on May 30th. We met with the Sanimax representatives, in a conference room where Mr. Lortiz gave a process and facility overview as follows:

Process Description

The Sanimax facility was originally built in the 1890's as a flour mill. In 1941, a company began using the facility as a rendering and hides processing facility. In 2005, Sanimax bought and began operating the site.

Sanimax receives animal byproducts from slaughter houses (approximately 80% beef, 20% pork) via trucks that are covered with tarps. The trucks dump the byproducts into staging pits in the staging building. From there, the bone and offal move to the sizing and 3-stage grinding areas. The raw material is mixed into the fluidizing area, creating a slurry. The slurry is pumped to one of two evaporators. The evaporation system flashes off water at about 280°F. Each evaporator system has its own condenser where moisture from the raw material drops out. Cooked material is pumped over static screens to separate the solid material from the tallow. The solid (protein) is divided from the tallow via gravity, centrifugal, and mechanical separation. Tallow is pumped to process tanks and the solids are conveyed to the milling operation. The solids finally go to the finishing and blending areas via a shaker screen. The solids are stored in five 500,000-lb storage silos that vent into the plant and six 87,000-lb bins that are enclosed inside the building. The tallow is pumped to two centrifuges to remove moisture and insoluble material. From the

centrifuges, the tallow is pumped to process tanks where fines are filtered out. The final product liquid is stored in 360,000 lb tanks. Mr. Loritz stated the amount of solids and fat final product shipped per week totals about 5.5 million pounds.

The hide building is separate from the main processing building. Raw hides are dumped in front of the building onto the pavement. From outdoor storage slab, the hides are moved via front-end loader to a 2,000 gallon freshwater bath inside the building. Next, the hides are trimmed and stripped by hand, and fed into the flesher. From the flesher, the hides are cured in brine water. After the curing area, hides are hung on a hook line to a ringer to dewater, and a manual grading table. The finished hides are shipped via truck and rail. Sanimax processes about 4,000 hides per day.

The facility operates three steam boilers. Mr. Loritz stated they meet capacity using one main boiler and use the other two about once every two months. The boilers primarily use natural gas, but are also permitted to run on tallow, #2 fuel oil, and grease. The facility currently uses two main Venturi scrubbers and added "prescrubbers" in 2010. Mr. Loritz stated the facility recently applied for a permit to operate a new 10,000 cfm regenerative thermal oxidizer (RTO) and hope to begin operating it in the week following the inspection. The last stack testing was performed on the evaporators, boilers, and polishing scrubber #2 for PM, VOC, and HAPs in 2010 and 2012.

The facility representatives indicated that most odor complaints come indirectly through the county, not directly to the facility.

Facility Tour

The facility tour began at 3:35 pm on the roof where we recorded one infrared video of the main boiler stack. Back inside the building, we observed very stong odors throughout the facility. First, we observed the shaker screens that were sizing finished protein. Then, we viewed the pretreatment scrubber room, which we observed had a different odor than the protein room. Mr. Grant Johnson stated the fat process has a distinct odor from the protein process. The floor was slippery throughout the facility. Next, we observed the grinding room and met with the main controller in the control room. Then, we moved outside to observe the hide pile and the truck unloading area. Mr. Lortiz stated that they spray the hide pile to keep it wet and cool for the purposes of quality control. In the hide building, we observed employees manually cutting hides before trimming and sending the hides to the fleshing machine. Finally, we observed extremely strong odors in the wastewater pretreatment area. All photos taken during the inspection are saved in the electronic case file.

The facility tour ended at 4:50 pm.

Closing meeting

EPA representatives requested the following documents:

1. 2010 stack test

2. Other stack tests from last 5 years, summary pages
3. Non-AP-42 supporting emission calculations – in Air Emission Reports
4. Scrubber conditions for all scrubbers, electronic, for past 3 years
5. State enforcement responses
6. Boiler fuel reports (quarterly)
7. Odor control study 2009
8. RTO permit application
9. Malfunction plan
10. Chlorine usage (past 3 years)
11. Quarterly reports 2012, 2013
12. Annual Emission Reports 2010, 2011, 2012
13. TDS tracking in cooling water 2012-2013
14. Cooling tower make-up water added (gal/week) 2012-2013
15. MSPS additions to water treatment and amounts

Sanimax representatives claimed all photos as Confidential Business Information. EPA representatives left the Sanimax facility at approximately 5:15 pm CST.